

Key Concepts Chart

Condition	Action
MB of X > MC of X	Buy or do next X
MB of X < MC of X	Do not buy or do next X
MB of X = MC of X	Optimal (Efficient) amount of X

PPF Concepts Chart

Productive Efficiency	Maximum output
Productive Inefficiency	Less than maximum output
Unattainable Region	More resources are needed
Attainable Region	Efficient combination of goods

Supply & Demand Chart

Law of Demand	P ↑ Qd ↓ P ↓ Qd ↑	
Normal Good X	if income ↑	Dx ↑
	if income ↓	Dx ↓
Inferior Good Y	if income ↑	DY ↓
	if income ↓	DY ↑
X and Y Substitutes	if PX ↑	DY ↑
	if PX ↓	DY ↓
X and Y Complements	DX ↑	PY ↓
	DY ↓	PX ↑
Law of Supply	P ↑ Qs ↑ P ↓ Qs ↓	
Surplus	Disequilibrium	QS > Qd
Shortage	Disequilibrium	Qd > QS
Consumers' Surplus	= Maximum Buying Price	- Price Paid
Producers' (Sellers') Surplus	= Price Received	- Minimum Selling Price
Total Surplus (TS)	= Consumers' Surplus (CS)	+ Producers' Surplus (PS)

Unemployment Chart

Total Population (TP)	= (P < 16, AF, I) + (CNP = LF' + (CLF = E + U))
Unemployment Rate (U)	= Number of unemployed persons / Civilian Labor Force
Employment Rate (E)	= Number of employed persons / Civilian non-institutional population
Labor force Participation Rate (LFPR)	= Civilian labor force / Civilian non-institutional population
Frictional Unemployment Rate (U _f)	= Number of frictionally unemployed persons / Civilian Labor Force
Structural Unemployment Rate (U _s)	= Number of structurally unemployed persons / Civilian Labor Force
Natural Unemployment Rate (U _n)	= Frictional unemployment rate (U _f) + Structural Unemployment Rate (U _s)
Cyclical Unemployment Rate (U _c)	= Unemployment rate (U) - Natural Unemployment Rate (U _n)
Alternative Unemployment Rate (U _a)	= Number of unemployed persons + Discouraged Workers / Civilian labor force + Discouraged Workers

Prices Chart

CPI	=	$\frac{\text{Total dollar expenditure in current year}}{\text{Total dollar expenditure in base year}} \times 100$
Percentage Change in Prices (inflation)	=	$\frac{(\text{CPI}_{\text{later year}} - \text{CPI}_{\text{earlier year}})}{\text{CPI}_{\text{earlier year}}} \times 100$
Real Income	=	$\frac{\text{Nominal Income}}{\text{CPI}} \times 100$
Salary in Today's (current) Dollars	=	$\text{Salary earlier year} \times \frac{(\text{CPI}_{\text{current year}})}{(\text{CPI}_{\text{earlier year}})}$
Dollar amount in Today's (current) Dollars	=	$\text{Dollar amount}_{\text{earlier year}} \times \frac{(\text{CPI}_{\text{current year}})}{(\text{CPI}_{\text{earlier year}})}$

